lished algorithm to assess quality. Evaluation criteria included methodological characteristics (perspective, selection of comparators, and modeling framework), health care system characteristics (relevance and applicability of clinical, treatment pattern and cost data), population characteristics (generalizability), and implications. **RESULTS:** Large variation in study quality was observed, particularly with outcome data and treatment patterns. We found that data on the effectiveness of drugs was typically extracted from clinical trials that did not include an Asian population, used inappropriate comparators and involved practice patterns that were not consistent with standards of care in Korea. With respect to treatment patterns, the most frequent situation relied on expert opinion from academic physicians in specialty practice. The Korean National Health Insurance Claims Database was a good source of disease specific costs, but was rarely used. Furthermore, the database failed to capture noncovered services. Preference measures, when used, were not elicited from the Korean population. Most studies (80%) did not clarify the funding source. **CONCLUSIONS:** If the Korean economic evaluation policy is to provide meaningful data for decision makers, the quality of cost-effectiveness studies will need to improve dramatically. This may involve access to or creation of better data, more diverse funding, improved training of researchers and evaluators, and partnerships with technology manufacturers.

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A CENTRAL COMPUTERIZED DRUG PRIOR-AUTHORIZATION PROCESS IN A MANAGED CARE SETTING IN ISRAEL

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OBJECTIVES: To implement a computerized, centralized, drug prior-authorization process in a national managed care organization to control utilization and expenditures of expensive medications and to ensure uniformity of authorization criteria throughout the organization. **METHODS:** This program was implemented in the Leumit Health Fund, a HMO operating in Israel. The HMO's Medical Division has formulated a drug policy mandating prior-approval by the Central Medicines Department for expensive drugs. Additionally, these products may only be dispensed from HMO owned and operated pharmacies. To expedite this authorization process, a special computer program was developed which operates under the HMO's electronic patient record (EPR) system. Upon prescribing one of these drugs, a window automatically appears instructing the physician to press a function key for transmission of an authorization request to the Medical Division for approval of HMO coverage. Two lines are provided to enter supplementary information. The patient is then given a computer-generated prescription which prior to approval, cannot be dispensed via the HMO's pharmacy dispensing program which is integrated with the EPR. The distribution of drugs requested by class, and proportion of requests rejected for the year 2003 was evaluated. The aggregate monetary value of the requests denied was evaluated. **RESULTS:** Throughout the year 2003, 38,490 requests were submitted, 44.88% of which were denied. The distribution of requests by drug or drug class was: Antineoplastic and immunomodulating agents 15.58%; neurologicals (not including anti-epileptics) 14%; newer insulins and rosiglitazone 12%; ocular lubricants (for patients not suffering from FD or CF) 10.55%; angiotensin receptor blockers 10.24%; clopidogrel 7.18%; other 30.45%. The annual aggregate potential cost of requests denied was 82,771,608 New Israel Shekels (1 NIS = 4.6 USD). Requests for antineoplastic and immunomodulating agents accounted for 36.37% of this sum. **CONCLUSIONS:** The system was successfully implemented and facilitated standardized approval criteria on the national level.

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DEVELOPMENT AND VALIDATION OF A CLAIMS-BASED RISK ASSESSMENT MODEL TO PREDICT PHARMACY EXPENDITURES IN A COMMERCIAL POPULATION

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OBJECTIVES: To empirically develop and validate the RxCost Model, a prospective and concurrent risk assessment model that uses claims-based diagnostic information to predict future pharmacy expenditures for a US commercial population. Additionally, we sought to empirically develop, validate, and compare the Mixed RxCost (MRxCost) Model to explore the gain in predictive power associated with adding drug information to the RxCost Model. Prescription cost risk assessment models can be used to profile physician practices or control for comorbidity burden in economic studies. **METHODS:** A retrospective longitudinal cohort study using MEDSTAT MarketScan claims data (1998–2000) for ambulatory persons who were continuously enrolled for at least 13 months and were 18 to 64 years old was used. A training sample consisting of over 1.3 million lives was utilized to develop the models. Model coefficients were developed from AHRQ clinical classification software, clinical expert panel, and stepwise OLS regression to screen noise variables. A random holdout sample of 218,383 was utilized to validate the models and to compare the performance of each model. Measure of discrimination (R-squared), predictive ratios, and discrimination for hypothetical physician groups were computed and compared to each other as well as to a Demographic-only model and the proprietary DCG-HCC model. **RESULTS:** The R-square value for the prospective RxCost, the MRxCost Model and the DCG-HCC using the validation sample was 0.22, 0.34 and 0.16, respectively and was 0.34 for the concurrent RxCost model. The RxCost model's predictive ratio's varied between 0.93 and 1.05 for clinical subgroups and ranged from 1.03 to 1.04 across hypothetical physician patient groups of size 10 to 500. **CONCLUSIONS:** The RxCost Model was successfully developed and it outperformed the DCG-HCC model in terms of R-square after re-calibrating the DCG-HCC model. The MRxCost Model also proved that supplementing drug information can improve discriminatory power.

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DEVELOPING KEY PERFORMANCE INDICATORS FOR THE AUSTRALIAN REIMBURSEMENT SYSTEM

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OBJECTIVES: To develop key performance indicators for the Australian reimbursement system and to facilitate ongoing analysis of the drug funding environment. **METHODS:** This study involved the establishment of a relational database that captured all relevant data over a 14-year period. This included details of the Australian Pharmaceutical Benefits Advisory Committee recommendations, listing criteria, product type, pricing, type of economic evaluation, and public expenditure by product type. A series of pricing indexes was also developed. The key performance indicators are in the process of being developed with input from industry and Government. These objectives are consistent with the goals of the Free Trade Agreement between Australia and the USA. **RESULTS:** The key performance indica-